Irish Woodturners Guild

Dublin Chapter Newsletter

October 2015



Inside this Issue:

Yann Marot makes a "ropy" bowl.



Caption Competition Results. P4.

Would you know what the top-ten hardest woods are? P7.

Upcoming Events

- Dublin Chapter AGM - November 7th.

Chapter Trade Stands: -

- * October The Carpentry Store
- * November The Woodshed.
- * December The Hut.

Who was winning 10 years ago?

Pictures of competition winners 10 years ago this month. Can you name the winners?
Answers in the next issue.







experienced

beginners

Who were the winners last month 10 years ago? See page 6.

As Summer into Autumn slips by Emily Dickinson

As Summer into Autumn slips
And yet we sooner say
"The Summer" than "the Autumn," lest
We turn the sun away,

And almost count it an Affront The presence to concede Of one however lovely, not The one that we have loved --

So we evade the charge of Years On one attempting shy The Circumvention of the Shaft Of Life's Declivity.



Vive le bédane.

The September demo was given by the French woodturner Yann Marot. On tour in Ireland, Yann showed us some basic turning skills; how to make a spatula; and a rope bowl. All of these showed his skills with a peculiarly French woodturning tool - the bédane.



The demo started with Yann very quickly showing us how he roughed an ash blank true and then put some shapes on it. The large roughing gouge that he used was ground quite sharp, both in terms of its edge and also in terms of its angle. It was no more than 40 degrees. He demonstrated the different angles of approach of the gouge to the wood, by listening to the sound that it made and also the type of shavings that were made. He showed how a good cut is achieved with the least sound and vibration and by producing skinny shavings. On the same piece he then added some beads and coves, joining them with curves. He stressed that

where possible; all curves on a piece should be smooth and joined up to form an overall pleasing shape.

During this part, he introduced the bédane, which he described as the popular tool of choice for the French woodturner. He used several sizes, but they were all made from square (or rectangular) steel bar and ground with a straight edge across the bar and a bevel of around 45 degrees. This gave an overall shape of a very deep carpenters chisel [in fact the translation of bédane, is chisel]. It is used with the bevel upwards and the action is not that different from using a skew. It contacts the wood high above the centre line. It is good for producing wide grooves, but like the



skew it can be used for beads, and curves, and is particularly good for making very clean cuts – the corner where a bead raises up, for example. He used the bédane at a slight angle to the wood, siting the example of using a carpenter's plane, where you never move along the grain with the plane completely straight. You present it at a slight angle to the grain. So it is with the bédane and the skew.

Yann then moved on to another square ash blank, which he rounded in a blink with the large roughing gouge. He produced some grooves and curves on this piece which took the shape of an elaborate tool handle. The small bédane was used to produce the final clean detail. He used a small spindle gouge to make some coves, showing how the long cove was matched with the general curves of the piece. He preferred the spindle gouge to be ground between 30 to 35 degrees and the wings ground back quite severely. The consequence of this is that the wings can be used for a scraping cut. When he handed this simple piece to the audience, it showed a level of skill whereby there were almost no tool-marks to be sanded out.

Spatula.

Yann then went on to explained how he would make a spatula from a small plank of ash $(170 \times 80 \times 16 \text{ mm})$, or any wood that has a straight grain. He mounted the piece by holding one end in the chuck (cunningly in between jaws) and the other end in a live centre in the tailstock.

Having set the blank whirling on the lathe (it was quiet noisy), some people were surprised when he reached for a skew chisel. He admitted that this was not every

Chairman: Bob Finley 086 8323730 DWT.Chair@gmail.com

Secretary: Joe O'Neill 087 623 0162 DWT.Secretary@gmail.com

Treasurer: Vincent Whelan 087 760 4918 DWT.Treasurer@gmail.com

Vice-Chairman: Joe McLoughlin 087 261 0803

Membership: Michael Clarke 087 252 2637 DWT.Membership@gmail.com

Competitions: W/shops: John Doran 087 639 3081

DWT. Competitions@gmail.com

Books & Video: Eamonn Boland 086 274 7600 DWT.Library@gmail.com

Exhibitions: Paul Murtagh 087 133 1292 01 456 5509

Audio/Visual: Tony Hartney 087 681 4912 DWT.Video@gmail.com

Newsletter: Mike Sims 087 989 8793

DWT.Newsletter@gmail.com

woodturner's choice, but when used correctly, he believed it was a useful tool. The skew was ground on the diagonal and he used it with the point upwards. "Contact should be made from the centre to the bottom of the cutting edge" was his advice. "Contact up towards the point would also cut the wood – but only for a very short time!" he chuckled.



The end held in the chuck was intended as the larger end of the spatula and Yann started by removing material from the middle towards the handle end at the tailstock. He removed material to make a smooth curve. He continued on until the handle was rounded, and explained that he intended to produce a long ogee or "s" shape from the large end, through the middle and broadening slightly at the end of the handle. No simple cylindrical handle for this man! The handle was getting quite thin at this stage (less than 1 cm) and he described how he pushed down on the toolrest, not the wood, in order to reduce vibration. He also supported the piece underneath with his index finger as he applied the gouge around the

thinnest point. Satisfied with the overall shape, he cut a few rings on the end of the handle and made one final finishing pass producing very fine shavings with the skew held with its handle under his forearm (as Glenn Lucas did). Then two delicate vee cuts were made beyond the end of the handle with a skew. The furthest one cut right through, allowing the tailstock to be move away. Using the same skew and supporting the turning piece in his left hand (checking all the time for the smell of burning!), he gently removed the remaining vee cut nub.

The turning completed, he handed this piece around, and explained that all that remained to finish the spatula was to shape the end on the band-saw. This he left to our imaginations.

Rope Bowl

For this item, one of his signature pieces, Yann used an oak blank mounted on a faceplate with the grain across the lathe bed. The blank was approximately 12 cm diam x 10 cm deep. The bowl was so named because part of the bowl's sides were beaded and roughed up to give the appearance of rope.

Before starting, he explained the steps. He would firstly shape the outside (essentially into a sphere), turning a spigot on the foot end; he would form the beads on the outside, that would then become the rope; then clean up the areas above and below the rope; then hollow the bowl with it held in the spigot; finally, he would mount the piece on a custom fitted jamb chuck to finish the bottom, making a small flat for the base. So it would be reversed three times.

He explained at this time that the bowl would not have the rim flat across the diameter. The rim would be flat, but angled down towards the base. At first glance this would draw the eye inside the bowl,



leading to an examination of the outside, followed by turning it over a looking at the base.

With the face-plated end mounted at the headstock, he started by setting the blank turning at the slowest speed, and then slowly brought up the tailstock to almost engage the live centre. He explained this as a way to establish if the chuck and the live centre were on the same centre-line. If they were miss-aligned, then the tip of the live centre would make a small circle on the blank as they were about to touch. Unnoticed, this could lead to extra vibration or inaccuracy. As lathes get older and more worn, then this is more liable to happen. Yann's solution was to gently tap the tailstock sideways to get it back on centre, before finally tightening it. On the day, Yann readjusted the swivel-headstock of the lathe and all was well.

He used a bowl gouge ground at 65 – 70 degrees with wings swept well back, to true the blank, moving tail to headstock. He held the gouge as a left-hander would, and had his index finger (of the right hand) wrapped under the toolrest to reduce vibration. He then made the blank into a spherical shape, making the final shaping cuts with the wings of the gouge as a scaper. Making the sphere as perfect as possible at this early stage was important, he explained. After the tea-break, the blank received a spigot, which he spent much time on, stressing that the correct angle (to accommodate the chuck jaws when reversed) and a good finish, should not be made casually. They both contribute to accuracy, later. For the spigot, he used a small spindle gouge.

Returning to the sphere, Yann quickly took some very fine finishing cuts with a scraper. It was ground to a point and he explained how he sharpened it. It was ground with the bottom upward and the support plate of the grinder at a negative angle. That way, the burr was left on the top face of the scraper.

When he was happy with the overall shape and finish, Yann marked the outside of the bowl with a pencil, to show the extent of the rope beads. Using a purpose-ground tool he then proceeded to cut eleven beads. The tool was a



square shank chisel with a concave shape ground out of the end of it. It was made the exact width that he required each bead to be, and he sharpened it with a slip-stone. The beads were then textured with a wire brush held in an electric drill. The drill was rotated in the opposite direction to the wood, at a low speed. Yann emphasized the need to wear glasses during this operation. The marks of the wire brush were then softened by repeating the process with a nylon brush in the drill. A spindle gouge was then used to remove the brush marks on the sphere above and below the rope and make a clean transition from the sphere's curve to the rope beads, top and bottom. Finally a skew was

used to clean out the bottom between each bead.

The bowl was then removed from the face-plate and reversed into a chuck, held by the previously made spigot for the next step. The hollowing was achieved using a medium bowl gouge with swept back wings. Yann's advice here is to do the hollowing in steps; meaning hollow from the centre outwards but to go into the bowl for part of the intended depth. Complete the hollowing out for a step to the final inner diameter of the bowl; switching to a spindle gouge for the final cuts. Then go deeper



into the bowl (down a step) and repeat the process. Do this until you are close to the final depth. This leaves plenty of material in the base of the bowl to support work on the upper areas. In his view, proceeding to hollow the bowl to its final depth and then working back up the walls means that the removal of material towards the rim will put the base under stress and produce undue vibration. The final hollowing of the bottom of the bowl ws done with a 10mm bowl gouge, which was ground to 80 - 90 degrees and well swept back. The blunt grind angle allowed bevel support going across the bottom. It did (I noticed) mean that you had to really lean over the lathe in order to start the cut. For this hollowing phase, Yann continually checked the wall-thickness by shining the light from the lamp on the bowl. Having produced a well-shaped outside, the differences in opaqueness were good enough to show thick spots – he did not use callipers. When he was satisfied with the hollowing, he removed the piece and the chuck.

The final step was to make a jamb-chuck, such that he could hold the hollowed piece sufficiently tight that he could finish the bottom. This he did this by turning a jamb that had a tapering core that would hold the piece sufficiently tight (but not tight enough to crack it) and with a shoulder up against which the rim would rest. Using callipers to get the rim inner diameter Yann deftly turned and fitted the bowl to chuck in about 10 minutes. Satisfied that the friction would hold the bowl in place, Yann then finished the bottom of the bowl to complete the sphere – the bottom of the inside was not flat – the sphere shape was continued for both the inside and the outside.

Removing the bowl from the jamb, he firstly re-checked the wall-thickness with the lamp; gave his approval; then replaced it and made a small flat for the base so that it would stand upright. The resulting rope bowl was passed around and we were invited to look at Yann's other pieces that were displayed on the nearby table.

Yann gave us an excellent demo that produced several simple pieces that were produced to an outstanding quality of shape and finish. A deft user of the skew (and the bédane, of course), he showed complete mastery of his tools, combined with a flowing design - the use of continuous curves was prominent in all his work.

A professional woodturning teacher in France, he was very free with his tips and advice. Merci Yann.

Mike.

Caption Competition - October



If you can think of a good caption for this picture of Glen Lucas, it will be published in the next issue.

Suggestions to the editor or the committee please.

Last months caption: Gerry Ryan suggested "Look, I'm the
Chairman. If I say it's a flower, IT'S A
FLOWER!"



Demonstrators 2015

Saturday

October - Pat Walsh November - Bob Finley

December - Joe O'Neill

Wednesday

October - Charlie Ryan

November - Malcolm Hill

December - Joe O'Neill

Useful Links - Interesting and useful items related to wood.







Looking for a serious woodturning course? While we have a French flavour to our newsletter this month I thought I would look around some of their websites. I came across this one. Yann Marot teaches here. http://escoulen.com/en/
They have a 5 month course!

September Competition Entrants





Experienced







Artistic

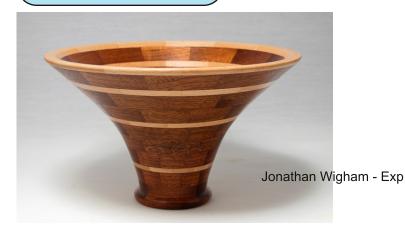
Advanced

OCT - Clock

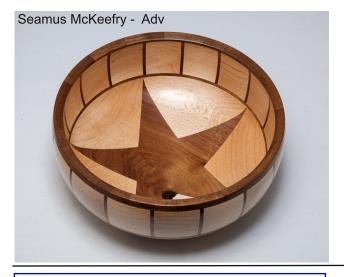
NOV - No Competition

DEC - Toy

September Competition Winners









Who were the winners 10 years ago September?

Michael Fay - adv

Una Sheehan - exp

Tom Delaney - beg.



advanced



experienced



beginners

Top Ten Hardest Woods by Eric Meier

The most common test for testing wood hardness is known as the Janka hardness test. The actual number listed in the wood profile is the amount of pounds-force (lbf) or newtons (N) required to imbed a .444" (11.28 mm) diameter steel ball into the wood to half the ball's diameter.

Janka hardness testing

In practical terms, a helpful question to ask would be: how hard is hard enough? A lot of times, especially on floors, the finish will get scratched, when the wood underneath is perfectly fine. (This obviously excludes dents.) In all practicality, a great number of hardwoods are "hard enough" for nearly all residential applications. But, if you've simply got to have the hardest lumber around, then this list is for you!

10. Cebil

(Anadenanthera colubrina)

3,630 lbf (16,150 N)

Also known as Curupay or by the exaggerated name Patagonian Rosewood, Cebil is not a true rosewood. It has a highly variable streaked appearance not too unlike Goncalo Alves.



9. Katalox / Wamara

(Swartzia spp.)

3,655 lbf (16,260 N)

Some pieces can be just about a dark as true ebony, while others are a more reddish brown with black streaks. So much depth in the Swartzia genus, there's something for everyone!



8. Black Ironwood

(Krugiodendron ferreum)

3,660 lbf (16,280 N)

Pieces are very seldom seen for sale, as this tree is too small to produce commercially viable lumber. Like the unrelated Desert Ironwood, Black Ironwood is an excellent choice for small turning projects.



7. African Blackwood

(Dalbergia melanoxylon)

3,670 lbf (16,320 N)

In some parts of the world, this wood has achieved an almost legendary status. Historical evidence points to this wood (rather than Diospyros spp.) being the original "ebony."



6. Camelthorn

(Vachellia erioloba)

3,680 lbf (16,370 N)

Formerly classified as a member of the Acacia genus, this south African hardwood is a tough customer. The wood is stubbornly hard, and the tree is protected by giant sharp thorns.



5. Verawood

(Bulnesia arborea)

3,710 lbf (16,520 N)

Sometimes called Argentine Lignum Vitae, this wood is a gem: inexpensive, great olive-green color, beautiful feathery grain pattern, and it takes a great natural polish on the lathe.

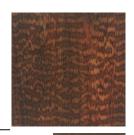


4. Snakewood

(Brosimum guianensis)

3,800 lbf (16,900 N)

It's easy to see what makes Snakewood so unique—its patterns and markings resemble the skin of a snake. Limited supply and high demand make this one of the most expensive woods on earth!



3. Gidgee

(Acacia cambagei)

4,270 lbf (18,990 N)

This Australian endemic is both very heavy and very strong. Some pieces are dark enough to be used as an ebony substitute: one that's even harder than the original article.



2. Lignum Vitae

(Guaiacum officinale)

4,390 lbf (19,510 N)

Widely accepted as the hardest wood in the world—this wood has been listed as an endangered species and is listed in CITES. Consider Verawood as a very close substitute.



1. Quebracho

(Schinopsis spp.)

4,570 lbf (20,340 N)

From the Spanish "quebrar hacha," which literally means "axe breaker." Aptly named, wood in the Schinopsis genus is among the heaviest and hardest in the world.



Honorable mentions: Leadwood (3,570 lbf), Brown Ebony (3,590 lbf), Ipe (3,510 lbf), Mopane (3,390 lbf), Burmese Blackwood (3,350 lbf), Kingwood (3,340 lbf).

Other notes:

- Hardness listings are for woods at a dried weight of 12% moisture content.
- There are a handful of obscure shrubs and small trees that yield wood which can be extremely hard. However, these species are typically only available regionally, and are never seen by the vast majority of woodworkers, nor are they reliably documented in woodworking publications.

